

HOWE'S POTATO MANUAL.

1892.



From THE RURAL NEW-YORKER: Copyrighted, 1891.

A bushel of Rural New-Yorker No. 2 Potatoes consisting of just 48 tubers.

BY G. D. HOWE,
NORTH HADLEY, HAMPSHIRE COUNTY, MASS.

NORTHAMPTON, MASS.:
PRESS OF GAZETTE PRINTING CO.
1892.



Bradley's Potato Manure was introduced to meet the call for a thoroughly reliable potato manure which could be sold at a moderate price. It did not have its origin in the laboratory, nor is it based upon any subtle theory. It is prepared from such materials as repeated *field tests* have proven will produce the largest crops of large, smooth-skinned potatoes of the best quality.

It is finely ground, and in such perfect mechanical condition that it never clogs in the planter, and therefore ensures even distribution over the field.

We receive annually from leading growers testimonials showing that Bradley's Potato Manure produces so healthy and vigorous a growth of plant and tuber that the crop is free from rot and scab,

the potatoes proving of fine quality, smooth-skinned and large-sized, and therefore readily commanding the highest market prices.

For Sale by our Local Agents Generally.

BRADLEY FERTILIZER CO.

27 KILBY ST., BOSTON, MASS.



Howe's Potato Manual for 1892,

—BY—

G. D. HOWE,

North Hadley, Hampshire County, Mass.

WITH each recurring issue of any publication that comes to us, we look for something new. Some new development in the line of our business, some new and better way of doing old and familiar tasks, some new receipt for making two dollars grow where only one grew before. An old saying is, "there is nothing new under the sun," and if it is true, it would be vain to attempt to present to my readers anything new this year. While there may be considerable truth in the old adage, yet for individuals there is something new to learn continually. In the matter of growing potatoes, I find that new experiences are constantly modifying my methods and views on the subject. Things that were thought to be settled become doubtful, theories come and go and the problem of successful potato growing seems to be as far from being confined to definite rules for procedure, which the novice can take up and follow with success, as it ever was. However, I will summarize some of the points on the subject that seem most pertinent to me, judging from my experience, study and observation. Potatoes seem to do best in warm loam, sandy or gravelly soil. The land should be thoroughly fitted to a good depth, though not deeper than the soil really is. If commercial fertilizer is used, as it should be in preference to yard manure, which can be better used on other crops, thoroughly mix it with soil or it will do little good and perhaps actual harm, because of its strength. If not using a planter, open furrows and sow fertilizer, then follow with cultivator closed up as narrow as possible, before dropping seed.

The time of planting seems to be of more importance than I formerly considered it. Plant as early as the season will permit, just as early as the soil gets dried off sufficiently to work well without packing. This time in my vicinity is the last week in April or first week of May. Don't make the mistake of getting the seed in too early, as it may be as disadvantageous as getting in too late. I use the Aspinwall Planter and wouldn't think of planting a field crop in any other way, now that I am familiar with its many advantages over hand work.

Before the plants get up and while they are fully a half inch from the surface, go over the field with a Breed's Weeder if you can possibly have one, and the best substitute if you cannot. Either a heavy bush or a very light smoothing harrow will do very well. Repeat the operation after plants are fully up, one to two inches high, and again once or twice as circumstances require, until plants are eight or ten inches tall. Cultivate them, throwing a little loose soil up around the plants with winged teeth then hand hoe only as necessary to keep down a few stray weeds that have escaped the previous processes. At all events, kill all weeds while they are very small and keep the piece clean till digging time, and that final work on the crop will be correspondingly easy.

The killing of beetles as quick as they make their appearance, is a very important matter, as they grow very rapidly and before you are aware of it your potato plants are divested of their leaves and dollars are taken right out of the crop in a day's time. I have found this one of the most perplexing problems in the culture of potatoes on a large scale, and have tried about all methods and machines until I think I have found a very satisfactory way. If applying Bordeaux mixture, put the poison (London Purple is preferred on account of its lightness), into that and prevent blight and kill beetles at the same time. If not using the Bordeaux mixture, make a common white wash and apply the poison in that, and you will be surprised to find how many hard showers it will require to wash it off. With my horse power machine, ten acres can be poisoned in a day.

With the crop grown, dig it as early as possible after the vines are fully dry, for the eating qualities of the tubers deteriorate seriously by remaining in the ground; though I am of the opinion that they improve for seed stock by remaining a longer time in the soil. Sell right from the lot if any fair price is offered. Observe the methods of your most successful neighbors, give the matter thought and you will be pretty sure to find the culture of potatoes increasingly interesting and profitable. Wishing you all success, and looking for communications from more than my usual number of patrons, I am faithfully yours.

G. D. HOWE.

Pamphlets Sent Free By The Mapes Company.

1. Potato Growing.

The Ameriean Agricultrist's Great PRIZE CROP CONTEST.—Potatoes, Corn, Wheat, Oats. How the two largest crops of potatoes ever grown with fertilizers or manure, (847 and 745 bushels per acre) were raised with the MAPES POTATO MANURE. Over 6,100 bushels of potatoes on a 20-acre field at Freehold, New Jersey, Season, 1890. This field "was formerly the poorest on the farm ; rarely in former years, did this farm, with farm manure, bone and marl, and under favorable conditions, produce 20 bushels of wheat or 40 to 50 barrels of potatoes per acre." Since the commencement of the use of the MAPES MANURES, some 15 years ago, the land has become so much improved that the crops for 6 years and over have averaged NEARLY DOUBLE those of former years. Other farms brought up from poor to good condition, and with profit from the start by the MAPES SYSTEM of manuring on a 5-year rotation: One ton per acre of the MAPES POTATO MANURE on potatoes; succeeding crops, wheat, grass, (2 years or more). Corn, with little or no additional fertilizer. Full details given.

2. Tobacco Growing.

Suggestions for more successful competition against Sumatra wrapper leaf.—Remarkable results with the MAPES TOBACCO MANURE in Massachusetts, Connecticut and Pennsylvania in producing Yield, Quality, Good burn, High finish, etc. 2,400 pounds Havana Leaf per acre, on an average for 5 years in Connecticut by an old user of the MAPES MANURE.

Colored Photographs of Havana Leaf (crop, 1891) grown exclusively with the MAPES TOBACCO MANURE, showing FINE TEXTURE, FINISH and HIGH VALUE for wrappers as compared with crops grown with stable manure, cotton seed meal, etc. Highest market prices obtained.

3. Fruit and Orange Growing.

Necessity of SPECIAL manuring for promoting QUALITY and QUANTITY of fruits.—Oranges, Grapes, Small Fruits, apart from vigorous wood growth.

4. Descriptive Pamphlet.

THE MAPES MANURES and HOW TO USE THEM: On Turnip, Cabbage, Cauliflower, Sugar Beets, Tomatoes (for canning), Onions, Celery, Rhubarb, Top dressing Grass or Lawns, Seeding to Grass, Orchards, Tobacco, Small Fruits, Grapes and general Farm Crops.

5. Chemicals and Clover.

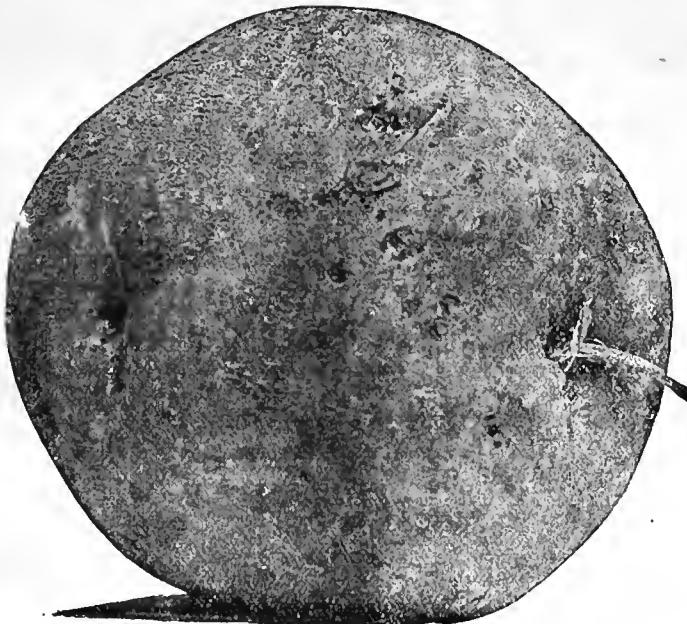
(Now in Press) by H. W. Collingwood, of the *Rural New-Yorker*, an account of visits to farms that are now producing double the crops of former years before the MAPES HIGH-GRADE MANURES were used. No live stock kept except horses, cows and pigs, for farm work and family use. All farm manure used on the corn crop. Farming made easier. Poor lands brought up to high fertility.

Arrangements have been perfected whereby users of fertilizers, even in sections where the MAPES MANURES are not for sale by local dealers, can procure these manures in ANY QUANTITY (one bag and upwards) at reasonable rates. Correspondence solicited.

THE MAPES FORMULA AND PERUVIAN GUANO CO.

143 Liberty St., N. Y.

Branch at 242 State St., Hartford, Conn.



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HOWE'S PREMIUM.

Type of Potato No. 1.—For description and prices, see pages 9 and 11.

INTERESTING CLIPPINGS.

Irish potatoes stored in cellars should be looked carefully after. There is more danger in their getting too warm than too cold. A temperature of 32° won't hurt them if in total darkness, as they should be, and probably the best temperature while not so low as 32° is not over 35° to 40°. An occasional overhauling and picking out of any decayed potatoes is necessary and plaster or air-slaked lime sprinkled through them is a good preventive of rot.

From Orchard and Garden, Nov. '91.

Don't Feed Rotten Potatoes.

S. H. KELLOGG, CLAREMONT, CAL.

I do not feel quite satisfied with the editor's position, in one of the late numbers, on the use of rotten potatoes. Encouraged by this and the statement of a correspondent in the same number, I fed to my hens sound and unsound potatoes, and, within about ten days twenty-five of my best laying hens had died, evidently poisoned by these potatoes. At once I turned to the article on potatoes, in Appleton's Cyclopedic, and found the whole thing explained. "The potato is sometimes liable to the presence of an excess of a poisonous principle known as solanum, but particularly is *sprouted potatoes*. A very small quantity of this principle will produce symptoms of poisoning, has been proved by actual experiment. Sprouted potatoes, when about to be used as food are better if pared and soaked some hours in cold water; and such a precaution may preclude the possibility of any poisonous result from their use." In California we can raise two crops of potatoes in the year. The second crop is planted in August, from the seed previously grown. At this season there is a scarcity of vegetables and sprouted potatoes being thrown away, mingled with rotten ones, are eagerly gobbed up by the hens. The poisoned bird sits on the ground, with its beak resting upon the ground and remains in that position until it dies. Since my loss I have learned of two or three other neighbors whose fowls suffered in the same way from rotten and sprouting potatoes. [We extend thanks to our correspondent for his kindness in throwing so much light on the subject.—ED.]—*From the Poultry Keeper, Dec. '91.*

BURPEE'S SEEDS GROW

Did you ever plant Seeds and then wait sadly for the green leaves that never came? **BURPEE'S SEEDS** are not that kind; you plant them; **they grow**. That's one reason why our mail order Seed Business is the largest. There is nothing doubtful about **BURPEE'S SEEDS**; their strong vitality is tested before selling, while having all been grown from the **most thoroughbred strains** they are equally sure to delight the planter with the Choicest Vegetables and most Beautiful Flowers. If you appreciate quality in Seeds, write to-day for **Burpee's Farm Annual for 1892.**



It is a handsome book of 168 pages; tells all about The **BEST GARDEN, FARM and FLOWER SEEDS**, including **RARE NOVELTIES of SURPASSING MERIT**, which cannot be obtained elsewhere—**FREE to all who intend to purchase Seeds.**



W. ATLEE BURPEE & CO., PHILADELPHIA, PA.



SPRAY YOUR FRUIT TREES AND VINES

Wormy Fruit and Leaf Blight of Apples, Pears, Cherries, EXCELSIOR SPRAYING Grape and Potato Rot, Plum Curculia prevented by using **EXCELSIOR SPRAYING OUTFITS.**

PERFECT FRUIT ALWAYS SELLS AT GOOD PRICES. Catalogue showing all injurious insects to Fruits mailed free. Large stock of Fruit Trees, Vines, and Berry Plants at Bottom Prices. Address WM. STAHL, Quincy, Ills.



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MAR. 10, 1891

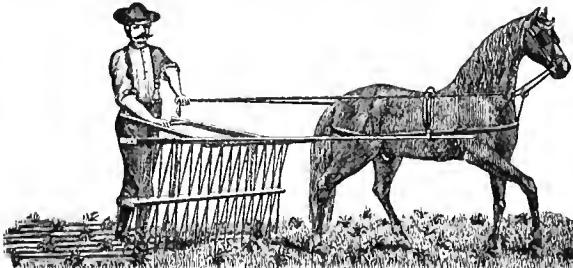
THE "STAY ON" "STABLE BLANKET. THE HORSE'S COMFORT.

This Blanket remains securely in its place on the horse, is loose and comfortably adjusted at every point, made of best wearing material and cannot be trampled upon. Satisfaction of horsemen everywhere. A full descriptive circular sent on application.

Burlington Blanket Co.,
Burlington, Wis.

BREED'S UNIVERSAL WEEDEER AND CULTIVATOR.

For weeding and cultivating all standard farm crops and all putting in grain and grass seed it has no equal.



For cultivating wheat, and all growing grains, also for leveling and working in commercial fertilizer it is perfect.

Early and frequent use are only requ'ed to secure the best results. Endorsed by leading agriculturists throughout the country. Jas. J. II. Gragory, the noted seedsman, in his annual catalogue for 1891 in an article, "How I Grow Potatoes," recommended the weeder for the early cultivation of that crop.

"While one row of potatoes was being hoed by hand, it being too near the edge to use the weeder, my son hoed with the weeder and one horse, and more thoroughly, THIRTY SIX rows. I must have next year."

T. B. TERRY.

"I regard Breed's Weeder as one of the most valuable implements a farmer can afford to employ." J. J. THOMAS, Inventor of the Smoothing Harrow.

"We are using the Weeder today on a field of potatoes a foot high and it does the best work it has done yet for we have hit just the right condition of the soil." WALDO F. BROWN.

"Your Weeder is about all that can be asked for as a weed-killer and surface pulverizer." JOHN GOULD.

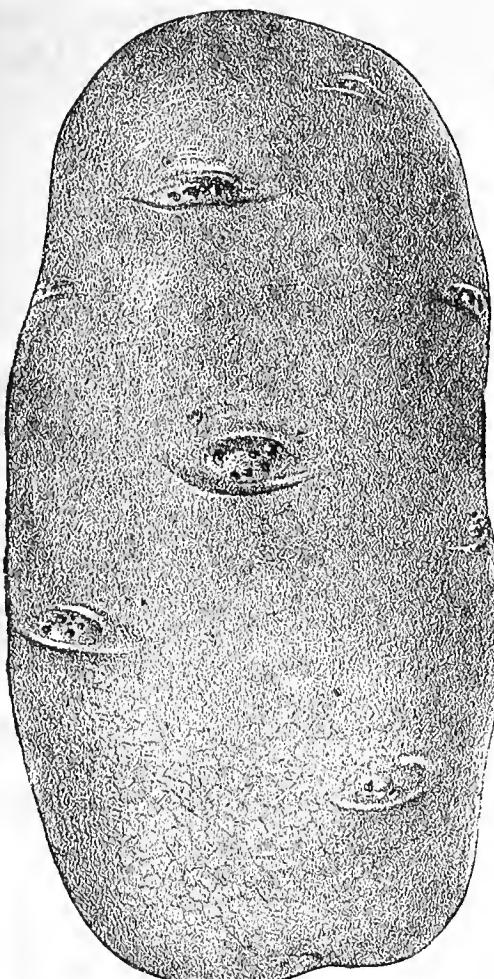
"Its advantage is, that it can comb out the fine weeds from the hills of corn and potatoes better than the harrow and later in the season, and so fully supersedes the hoe, doing better work than the hoe and doing it ten times as fast. I predict that it will come into very wide general use among progressive farmers everywhere on decent soil." W. L. CHAMBERLIN, Formerly of the Iowa Agr'l College.

"I have only words of recommendation for your Weeder."

CHAS. W. BLEW, Manager of the Northwestern Agriculturist.

THE UNIVERSAL WEEDEER CO., No. Weare, N. H.

Send for circulars and price list. Where we have no agent we will ship machines prepaid at retail price.



MUNROE CO. PRIZE.

Type of Potato No. 2.

have thread-like roots, enabling this parasite to fasten itself upon other plants and to grow there. These roots find their way into the structure of the plant and cause its decay. The temperature which is the most favorable for the development of these spores is between sixty degrees and seventy degrees. At eighty degrees and upwards the vitality of the spores is destroyed. We call the result of this sporadic work, rust. These spores fall upon the ground, and are carried down into the ground to the tubers. Here these mycelium or roots affect the tubers the same as with the leaves. The potatoes which mature in the hot weather will have less rot, as the spores are killed by the heat at eighty degrees. The later potatoes are the most liable. When the spores fall upon a dry surface they will die, but when they fall upon a moist soil they live, and in a wet time these living spores may be conveyed directly to the tubers, and to the cellar. At forty degrees, little or no activity is manifest; so the tubers should be stored in as cool and dry a place as possible. Heavy soils favor the rot; sandy soils will dry out sooner, and the spores will die. On wet land they are kept alive and active. It is best to plant the potatoes always upon dry land and avoid the wet spots. Potatoes should never be gathered in wet weather, as the spores will be carried into the cellar."

Potatoes for Pigs.

The Wisconsin experiment station ascertains that in fattening hogs 789 pounds of potatoes took the place of 178 pounds of corn meal, or in other words, 443 pounds of potatoes were required to take the place of 100 pounds of corn meal. This makes one pound corn meal worth nearly four and one-half pounds of potatoes. As several lots of animals were experimented on it is hardly possible that the results are very far from the average.

From the Farmers' Voice, Nov. '91.

Potato Parasites.

A. G. Miller of the Louisville (New York) Farmers' Institute, is reported in a contemporary to have spoken in substance as follows concerning enemies of the potato: "We must exterminate all these pests, and the farmers must wake up to this fact, and find out as much about them as possible. The worst enemy is one so minute that it cannot be seen, so silent that it cannot be heard, parasites of the fungus family—the potato rot. For fifty years this enemy has had a foothold on this crop, and has caused more loss than all others combined. The growth of this parasite is favored by certain climatic conditions, and is most active in heavy soils, where the moisture is greatest. This moisture favors the development of the fungus. The parasite is generated in the leaves, the stems and in the tubers. Fungi are plants living and feeding upon other plants. They cannot live in or upon inorganic matter like the soil. They have no seeds or flowers, but have the power of reproduction through spores, which

From the New York Weekly Witness.



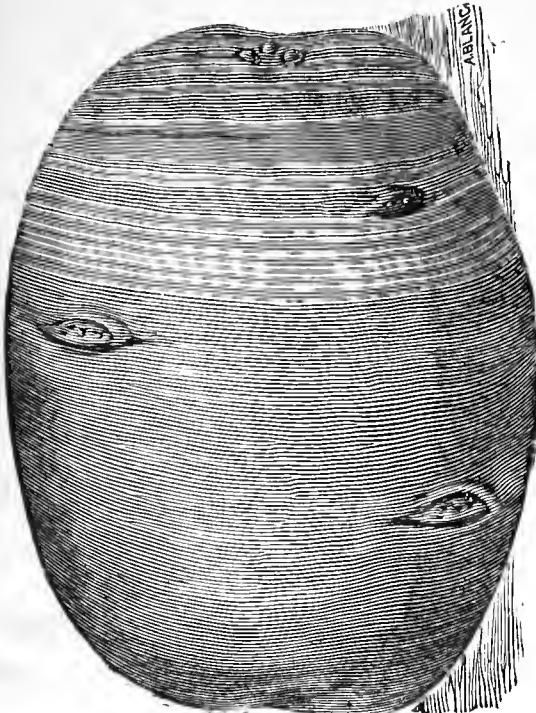
Dr. W. H. Morse of the Electro-Medical Institute, N. Y., replied to enquiry made by New England Farmer, Boston, whether it was possible to make an Electric Soap,—“In Dobbins’ Electric Soap, Electricity certainly plays “a part. It is a remarkably pure article, of “excellent quality. It contains no soda or “potash, apparently; refusing to turn red with “phenolphthalein. Thus the neutralizing prop-“erty of electricity is apparent; and the pres-“ence of alkalies not being manifest, the soap “has the effect of not drying skin, hair, and “nails, as alkaline soaps do.”

ELEC- performs wonders now-a-days, and adds to
TRICITY our comfort, convenience and welfare in very
many ways, but in nothing is it more won-
derful than Dobbins’ Electric Soap is, in its speedy attack upon
dirt, wherever found, and its absolute powerlessness to injure
fabrie or skin. Ask your grocer for it. Take no substitute.

I. L. CRAGIN & Co.,

Philadelphia, Pa.





CHAS. DOWNING.
Type of Potato No. 3.

ment of seeds is of the first importance, for "as ye sow so shall ye reap," and as "like produces like" so the use of the best seed will produce the best results, both as to yield and quality of crop. Improvement of seed may be accomplished by observing the following rules:

First. Select the best portion of ground than can be had of sufficient size to grow the seed for the succeeding season's crop.

Second. Prepare this portion by deep plowing and thorough harrowing until the soil is made perfectly fine.

Third. Take the best seed of the best variety, tubers of large and medium size, smooth and possessing the best form. The variety is of great importance, as there are varieties that will yield four times as much as others. Cut the seed into large pieces and plant not less than three and one-half feet between rows and twenty-six inches in the hills, and about three to five inches deep; cover in the most convenient manner. If the "Aspinwall" Potato Planter is used it does its own covering while planting, leaving the rows nicely ridged up, the sod lying loosely over the row, admitting the warmth of the sun and preventing rains from settling on the planted pieces of potato. Harrow all down perfectly, leveling and fining the soil three or four days after planting, and just before the sprouts come through the ground harrow again so as to prevent weeds from starting and making the sod open to the action of the air.

Fourth. As soon as the sprouts are four or five inches above ground, thin out to one stalk in a hill, being very careful to leave the largest and best stalk, and avoid disturbing it as much as possible.

This thinning out to one stalk in a hill is the most vital matter in the improvement and perfection of seed unless we may except the character of the seed used.

How can it be expected to grow good seed in hills with several stalks? Having but one stalk in a place gives to that stalk the best chance to make a perfect growth, and an additional advantage and a very great one too, will be found in planting the potatoes with two rows of corn and one row of potatoes, alternately, the corn affording a shade to the potato vines to prevent the fatal tendency to blight by the extreme heat of the sun falling on the vines, and a further benefit in this regard is plaiting as early as possible after the frost goes

(Continued on page 17.)

The Potato Crop.—Seed Development.

The rapidly increasing importance of the potato crop demands strenuous efforts on the part of farmers and gardeners to make essential improvements on the seed for this valuable and indispensable farm crop.

The report of the Agricultural Department of the Government shows an increase in the production of the potato in the past ten years of more than one-fourth, showing clearly that as fast as the production increases the demand for consumption multiplies in like ratio, thus emphasizing the well-established principle that increased production creates increased consumption.

This fact is most encouraging to farmers and gardeners, and should stimulate to greater effort to establish improvements both as to yield and quality of crop, the improvement of seed and the adoption of better methods, and the employment and use of the best (the most improved) implements and machinery for planting, cultivating and harvesting of this valuable crop.

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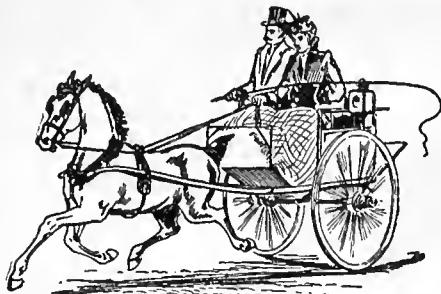
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MATRIMONY MADE EASY.



When a country boy has a sweet-heart, one of the usual ways of complimenting her, is to take her out riding, and generally with his best girl and best horse he is happy.

While we know nothing of the statistics, still it is our impression that one half of the proposals of marriage have been made when riding, and whether the answer received is in the affirmative or negative depends very much upon the style of the turn-out, and especially upon the appearance of the harness in which the horse or horses are working. What more natural than for a girl to assume that if the man dresses his horse in a shabby harness, he would be likely to dress her in like manner, whereas if the harness is bright and attractive she also would fare well. To accomplish this with little expense, it is only necessary to use **Frank Miller's Harness Dressing**; for the shabbiest and oldest harness will look like new when this desirable article is used. Its cost is saved many times over in length of wear of the harness.

Any young man who has his future at stake should be sure to have his harness thoroughly dressed with this dressing before he takes his best girl to ride.

SOLD BY ALL HARNESS DEALERS.

FRANK MILLER'S

Crown Dressing

LADIES AND CHILDREN

BOOTS AND SHOES.

An invaluable preparation for restoring Ladies' and Children's Boots, Shoes, Rubbers, Travelling Bags, and all black leather goods that are soiled or worn, to their original beauty and finish. BE SURE and ask for

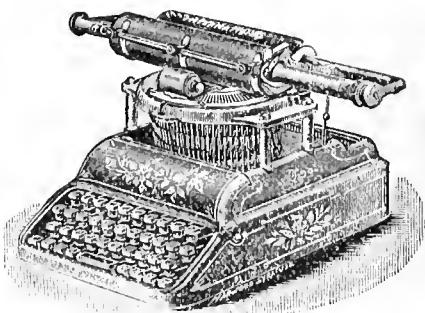
**FRANK MILLER'S
CROWN DRESSING.**



FREE STENOGRAPHY —AND— TYPEWRITING FREE

First-class facilities and best of teachers. Address, with stamp for return postage,
THE PARISH MFG. CO.,
PARISH, N. Y.

THE INTERNATIONAL TYPEWRITER.



A strictly first class machine. Fully warranted. Made from very best material, by skilled workmen, and with the best tools that have been devised for the purpose. Warranted to do all that can be reasonably expected of the very best typewriter extant. Capable of writing 150 words per minute—or more—according to the ability of the operator.

Price. . . . \$100.00.

If there is no agent in your town, address the manufacturers.

THE PARISH MFG. CO.,

Agents wanted.

PARISH, N. Y.



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QUINNIPAC—Type of Potato No. 4.

LEADING VARIETIES.

HOWE'S PREMIUM.—Illustrated on page 3. A new, very early sort of unusual promise. This is the most distinct variety ever offered. It is so unlike other potatoes in appearance that a bushel of them mixed at random in a large pile of one hundred different varieties, could be easily picked out again with a certainty. It is almost perfectly round, pinkish skin, white flesh, is exceedingly early, grows compact in the hill, yields well, resists rot, is good quality, and keeps sound and solid for a year. For a very early market potato this cannot be surpassed. It has done splendidly in most localities. Try it for the first digging. We quote the Seedsman Gregory again this year, because of his reliability. He says of this variety,—“We raised last season 430 bushels to a measured acre, with but very few small and hardly a rotten one on the entire piece. Among the score of varieties we raised last season, this one rotted the least of all, most of the field being entirely free from it. After testing hundreds of new varieties, we find this and the Six Weeks decidedly the most profitable varieties to raise for the early market. Prices on page 11.

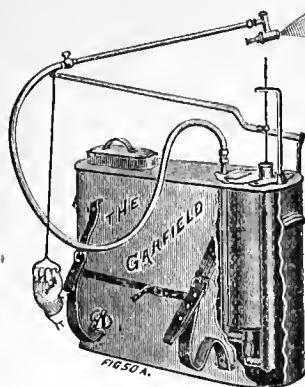
MONROE CO. PRIZE.—Illustrated on page 5. This variety has shown itself so worthy under my own eyes for four years and is so universally praised on every hand that I place it at the head for a general crop variety. I call it the heaviest yielder of any variety I have been able to bring into a fair comparison with it. It seems to grow anywhere, as to character of soil, is very vigorous and rank, and makes an immense growth of tops, and a corresponding growth of tubers if the land contains the fertility to carry out the crop. The quality is excellent, hardly equaled by that of any other variety if dug as soon as ripe. They are of large size. Skin white and inclined to be netted, flesh very white. Their quick, vigorous growth, enables them to get a deep hold on the soil that carries them right along in a dry time where many other shallow rooted varieties wither up and fail entirely. I obtained my original stock direct from the introducers and have it pure. Only early orders will be sure of a supply.

CHAS. DOWNING.—This variety, illustrated on page 7, is about as handsome in form as most people care to see. The eyes are very few in number and are perfectly level with the surface. The quality is equal that of the old Snowflake, which means that it is perfection itself. It is quite early but rather doubtful as a yielder. In some places it seems to yield very heavily and in others quite the reverse. It sets a large number of tubers.

QUINNIPAC.—Illustrated on this page.—A new late variety, of which I have but a small stock and so will not say much about it. I took hold of it because I believe it is the best of its class. Quite ideal in form, very smooth, excellent in quality. Resembles the White Star, but better.

EARLY PURITAN.—Illustrated on page 11. This is a splendid very early white potato. A seedling of Beauty of Hebron. It is doing well with me and I hear only favorable reports from all quarters. It will pay you well to try this sort if searching for the best; it may just fill your bill. Vines small, so can be planted close together.

RURAL NEW YORKER NO. 2.—This variety is well illustrated on the first page of cover. Color white, ideal in shape, very smooth surface, quality good. To my surprise it was relished by the beetles last season the least of any variety in my field. This is medium in season, has a very sparse top. Stalks and blossoms purplish. It is a very distinct variety and one over which there has been much ado made. It is reported a yield of over 1000 bushels per acre on the experimental grounds of the originator. Adapted to close planting on account of its vines. It certainly should be tried by every potato grower in the country.



The Garfield Knapsack Sprayer

STRONGEST AND BEST.

We fit it with cross sections of brass pipe to spray two rows of potatoes at the same time

SEE HERE

Pultney, N. Y., June 24th, 1891.

GENTLEMEN:—After three days trial in competition with two others, the new Garfield Knapsack Sprayer is pronounced the King.

Respectfully,

G. W. PECK & CO.

Send for Catalogue.

FIELD FORCE PUMP CO.,

Lockport, N. Y.

Subscribe for the "best Family Paper extant."

THE ILLUSTRATED CHRISTIAN WEEKLY.

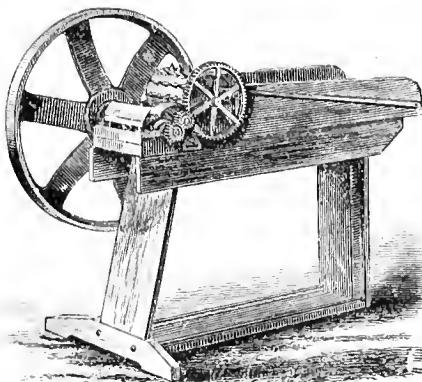
Has numerous departments, is fully illustrated, has associate and contributing Editors representing the different branches of the Christian church. Is strictly evangelical, but entirely non-sectarian in religion. Non-political but thoroughly patriotic. It is a publication that ought to enter every home in every part of the English speaking world.

To each subscriber sending \$2.50, a magnificent premium picture, in size 28 x 40 inches, in 14 oil colors, will be sent post-paid.

Sample copies and all information will be sent on application.

The Illustrated Christian Weekly Co., P. O. Box 1230, N. Y. City.

Agents wanted to whom liberal commission will be paid.



NO. 1 FODDER CUTTER.

THE DANIELS

FODDER CUTTER,

—MADE BY—

The Daniels Machine Co., Woodstock, Vt.

This cutter has no equal for cutting fodder of all kinds. Send for circular and price list.

Read what a Davenport, Iowa Feeder says.

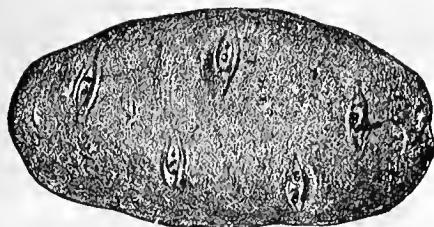
March 28, 1891.

GENTLEMEN:—We have been using your Daniel's Fodder Cutter for cutting fodder, car and all; and it is the best ear corn cutter we have ever seen. If properly advertised, hundreds of them could be sold to the cattle men of the west.

Yours Truly,

ISRAIL BARR & SÖN,

Davenport, Iowa.



EARLY PURITAN.
Type of Potato No. 5.

White Seedling, Gen. Sheridan, Cayuga, Fillbasket, Orange Co. White, are main crop potatoes and shown by Type No. 2.

Polaris, Hampden Beauty, Early Market, Early Sunrise, and P. E. I. Rose, are the leading early sorts and shown very well by Type 5.

Minister is a splendid early kind, different from most others in shape, but Type 2 comes nearest it.

Red Lady Finger, a delicacy for baking, you ought to try it.

Delaware, well shown by Type 3. A very valuable main crop kind, big yielder, white.

I especially commend the White Elephant as a heavy yielding main crop variety. It is the kind sold in Boston more than all other varieties combined; but sold as Hebron.

PRICE LIST.

Add 10 cents per lb. to all the following prices, if to be sent by mail.

Howe's Premium, \$4.50 per bbl., \$2.25 per bushel, 90 cents per peck, 60 cents for 3 lbs., 30 cents for 1 lb.

Quinnipiac same as above by peck and lb.

Monroe Co. Prize, New Queen, Polaris, Rural New Yorker No. 2, Boley's N. Spy, White Elephant, Early Puritan, \$3.50 per bbl., \$1.50 per bushel, 65 cents per peck, 25 cents for 3 lbs., 10 cents per lb.

A list of about 200 different varieties, but too long to name here, representing most of the recent novelties and standard kinds, 85 cents per peck, 25 cents for 3 lbs., 15 cents per lb.

Prices of the other varieties named above, same as the 200 list.

Potato seeds, from the balls, great variety mixed, 25 cents per package.

Write for what you want, and for special low prices if you do not see what you want listed here. Please say in ordering whether or not I shall substitute other as valuable kinds if out of what you name.

COLLECTIONS.

Many persons desire to try new varieties from time to time with a view of finding something more productive or earlier or of better quality, or are looking for something in a potato a little different from what they now have. To meet the wants of such I make these liberal offers:

I will pack a peck of a kind of ten valuable kinds in a bbl. for \$5.00, or $\frac{1}{2}$ peck of a kind to fill a bbl. for \$5.50, or 5 lbs. of a kind to fill a bbl. for \$6.00. At this low price I must be allowed to make up the assortment, though you may mention what varieties you don't want and I can give you something else. These are the lowest prices I ever put on collections of this sort, and they will probably secure a ready sale of my stock of varieties, so if it meets your case, order at once, as I could not purchase a number of varieties of other growers for half what I offer these to you for, consequently these prices will be limited by my ability to fill orders from stock of my own growing.

500 VARIETIES.

I have all the way from a few pounds to a bushel of a kind of over 500 varieties, to name which would take up too much space here. But the list includes about all the varieties you can mention, and if you are looking for a collection for any purpose, I can supply you. This list includes blue, black, purple, red, spotted, striped, blotched, and all the rest for color, and all shapes and types of potatoes, including many Kidney potatoes. If you want to grow a collection of as different appearing potatoes as you can find for exhibition purposes, I can fit you out.

Prices, 25c. per lb. by freight or express, and 35c. per lb. by mail. 1 lb. each of 25 varieties, \$4.50, of 50 kinds, \$8.00, and of 100 kinds, \$15.00.

A SPLENDID MAP.

In these times when the press keeps the people posted on the world's doings, not only in our own great country, but in the other continents, every home should have a world's map as complete and authentic as possible.

Such a map is sent prepaid to any address in the United States by the publishers of that great agricultural paper, THE PRAIRIE FARMER, Chicago, Ill., with that paper one year for \$1.75. The map alone is sold regularly for \$5, but by a special arrangement the above offer is made possible.

This map is Rand, McNally & Co.'s new reversible chart of the United States and world, and gives on front side the latest general map of the United States (size 66 x 46), new, thoroughly corrected, shows all railroads and important towns, counties and rivers. Each State is colored separately and each county outline plainly marked.

The back is covered with large scale map of the world. In the ocean spaces are given large maps of Germany, Norway and Sweden, and the British Isles; also comparative diagrams of rivers and mountains of the world; also descriptive sketch of every country on the face of the globe, with its area, population and location shown upon the map. The map is really an atlas, condensed and compiled in the most comprehensive and ready reference manner, all printed on one sheet.

This map sent prepaid and THE PRAIRIE FARMER one year for only \$1.75. So liberal an offer is seldom made, but this can be depended on. Order as once and address THE PRAIRIE FARMER, 166-168 Adams Street, Chicago.

EVERYBODY WANTS A STOCK JOURNAL
To learn the best methods of breeding the best stock.

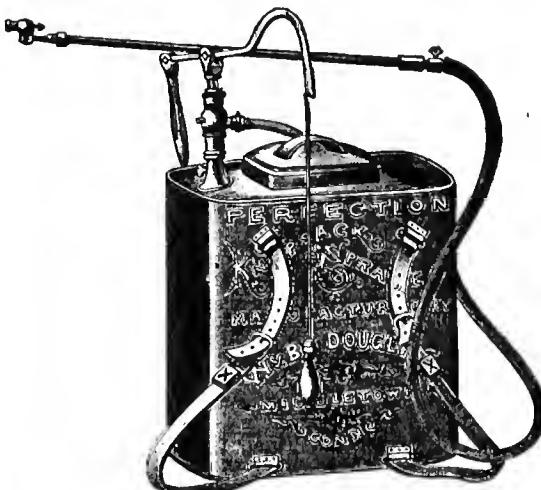
Western Agriculturist and Live Stock Journal.

The oldest and best. Established in 1868. National circulation. Special Departments for Draft and Coach Horses, Cattle, Sheep and Swine. No Stock Farmer can afford to do without it. Write for free sample copy; it speaks for itself. Agents wanted in every neighborhood. Liberal Cash Commissions. Subscriptions, \$1 10 a year.

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Western Agriculturist Co., Quincy, Ill.



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Sent C. O. I.D. for \$14.00.

NEWSPAPERS.

The great value newspapers are to us can hardly be estimated, and while we cannot spend all our time reading, a portion of it can be very profitably spent in this way. I am continually having inquiries from my patrons about newspapers that will meet their wants, and am glad to be of service to my friends in this direction, as I believe it means progress. I call the attention of all interested to this list, which includes the best publications in the several branches represented. My readers will certainly deem it a favor to have in so compact a form the address and brief description given of so many papers, and if writing any of them for sample copy or on other business, please do them and me the favor of mentioning "Howe's Potato Manual." As I see all the publications here listed I feel familiar with them and can advise my friends as to what is likely to meet their wants, and shall be glad to do so if you inclose stamp for reply.

EXPLANATION OF HEAD LINES.—A. Frequency of issue; s-w, semi-weekly; w, weekly; s-m, semi-monthly; m, monthly; q, quarterly.

B. Size of page.

C. What the paper is devoted to.—1, General Agriculture. 2, Poultry. 3, Bees. 4, Horticulture. 5, Live Stock. 6, Family. 7, Floriculture. 8, Miscellaneous. This Classification is not at all fine, and is intended only to give a general impression.

D. Number of pages.

E. Publishers price per year.

No.	Name.	Where Published.	A	B	C	D	E
1.	Advertisers' Gazette,	Prospect, Ohio,	m,	6x 9,	8,	20,	\$0.50
2.	American Bee-Keeper,	Jamestown, N. Y.,	m,	6x 9,	3,	20,	.50
3.	American Cultivator,	Boston, Mass.,	w,	11x16,	1,	16,	2.00
4.	American Dairymen,	New York, N. Y.,	w,	11x14,	5,	8,	1.50
5.	American Farm and Horticulturist, Richmond, Va.,		m,	8x12,	4,	24,	.25
6.	American Farm News,	Akron Ohio,	m,	11x14,	1-6,	24,	.25
7.	American Poultry Journal,	Chicago, Ill.,	m,	8x11,	5,	36,	1.00
8.	American Swineherd,	Chicago, Ill.,	m,	8x12,	5,	20,	.50
9.	Arkansas Farmer,	Little Rock, Ark.,	w,	15x22,	1,	8,	1.00
10.	Badger Farmer,	Oshkosh, Wis.,	m,	9x12,	1,	16,	.50
11.	Bee Keepers' Guide,	Kendallville, Ind.,	m,	6x 9,	3,	32,	.50
12.	Book-keeper	Detroit, Mich.,	m,	11x16,	8,	8,	.50
13.	Christian Weekly, Illustrated,	New York, N. Y.,	w,	12x16,	6,	16,	2.50
14.	Dairy World,	Chicago, Ill.,	m,	9x12,	5,	24,	1.00
15.	Delaware Farm and Home,	Wilmington, Del.,	w,	13x20,	1-6,	8,	1.00
16.	Fanciers' Journal,	Philadelphia, Pa.,	w,	11x15,	2,	16,	2.00
17.	Fanciers' Review,	Chatham, N. Y.,	m,	10x12,	2,	16,	.35
18.	Farm and Fireside,	Springfield, Ohio,	s-m,	11x16,	1-6,	16,	.50
19.	Farm and Vineyard,	Erie, Pa.,	m,	10x13,	4,	16,	.50
20.	Farm, Field and Stockman,	Chicago, Ill.,	w,	11x15,	1-5,	24,	1.00
21.	Farm Implements,	Minneapolis, Minn.,	m,	10x15,	8,	20,	1.00
22.	Farm Journal,	Philadelphia, Pa.,	m,	24x36,	1,	20,	.50
23.	Farm Journal,	Richmond, Va.,	m,	10x14,	1-6,	16,	.50
24.	Farm Poultry,	Boston, Mass.,	m,	9x12,	2,	28,	.50
25.	Farmers' Friend,	Mechanicsburg, Pa.,	w,	16x22,	1,	8,	1.25
26.	Farmers' Home,	Dayton, Ohio,	m,	11x15,	1,	16,	1.00
27.	Farmers' Home Journal,	Louisville, Ky.,	w,	17x22,	1-5,	8,	1.00
28.	Farmers' Review,	Chicago, Ill.,	w,	11x16,	1-5,	16,	1.25
29.	Farmers' Voice,	Chicago, Ill.,	w,	10x13,	6,	24,	1.00
30.	Gleanings in Bee Culture,	Medina, Ohio,	s m,	7x10,	3,	36,	1.00
31.	Green's Fruit Grower,	Rochester, N. Y.,	m,	15x23,	4,	8,	.50
32.	Home and Farm,	Louisville, Ky.,	s-m,	12x18,	6-1,	16,	.50
33.	Home, Farm and Factory,	St. Louis, Mo.,	m,	11x15,	6,	12,	.50
34.	Housekeeper,	Minneapolis, Minn.,	s-m,	11x16,	6,	20,	1.00
35.	Indiana Farmer,	Indianapolis, Ind.,	w,	11x17,	1,	6,	1.00
36.	Iowa Farmer and Breeder,	Cedar Rapids, Iowa,	s-m,	11x14,	1-5,	16,	.50
37.	Live-Stock Indicator,	Kansas City, Mo.,	w,	11x15,	1-5,	16,	1.00
38.	Maine Home Journal,	Rockland, Me.,	m,	10x12,	6,	16,	.25

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JAMESTOWN, N. Y.

1822.

1892.

THE BEST AGRICULTURAL WEEKLY
IN NEW ENGLAND.

The New England Farmer

The best agricultural weekly in New England, closed its 70th year this week. Its present editor and proprietor, Geo. M. Whitaker has worked wonders in the venerable sheet since assuming control a few years ago, giving it a push and general readability which makes it indispensable to the progressive thinking farmer, who has his eyes open to keep up with the age.—*Milford, Mass., Journal.*

Single Subscription, \$2.00 per year; in clubs, \$1.50; in clubs of 10 or over, \$1.40; on trial, three months for 25 cents. Send for sample copies to

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THE STANDARD

WORCESTER BUCKEYE MOWER.



Buy no Mower until you see the "Standard Worcester Buckeye"
with improvements of 1892.

**THE RICHARDSON MANUFACTURING COMPANY,
WORCESTER, MASS.**

39. Massachusetts Ploughman,	Boston, Mass.,	w,	18x23,	1,	8,	2.00
40. Mirror and Farmer,	Manchester, N. H.,	w,	16x24,	1,	8,	1.00
41. Missouri and Kansas Farmer,	Kansas City, Mo.,	m,	15x22,	6-5,	8,	.25
42. Montana Farming and S. Journal,	Helena, Montana,	w,	17x24,	5-6,	8,	2.00
43. National Farm and Fireside,	Washington, D. C.,	w,	9x12,	1,	16,	1.00
44. National Stockman and Farmer,	Pittsburgh, Pa.,	w,	11x16,	1-5,	24,	1.50
45. Nest Egg,	Burlington Junc., Mo.,	m,	6x 8,	2,	32,	.50
46. New England Fancier,	Danielsonville, Ct.,	m,	8x11,	2,	36,	.50
47. New England Farmer,	Boston, Mass.,	w,	15x22,	1,	8,	2.00
48. Northwestern Agriculturist,	Minneapolis, Minn.,	m,	11x16,	1,	24,	.50
49. Ohio Fanciers Herald,	Tiffin, Ohio,	s-m,	8x10,	2,	8,	.25
50. Ohio Farmer,	Cleveland, Ohio,	w,	11x16,	1,	20,	1.00
51. Ohio Poultry Journal,	Dayton, Ohio,	m,	9x12,	2,	28,	1.00
52. Ohio Valley Farmer,	Wheeling, W. Va.,	m,	11x15,	1,	16,	.50
53. Orange County Farmer,	Port Jervis, N. Y.,	w,	17x21,	1,	8,	1.50
54. Orange Judd Farmer,	Chicago, Ill.,	w,	9x12,	1,	20,	1.00
55. Orchard and Garden,	Little Silver, N. J.,	m,	9x12,	4,	20,	.50
56. Our Rural Homes,	Sturgis, Mich.,	m,	11x15,	6,	16,	.50
57. Pacific Farmer,	Portland, Oregon,	w,	11x15,	1-6,	16,	1.00
58. Park's Floral Magazine,	Libonia, Pa.,	m,	6x 9,	7,	16,	.50
59. Poultry Bulletin,	New York, N. Y.,	m,	9x12,	2,	28,	1.00
60. Poultry Chum,	Genesee, Ill.,	m,	9x12,	2,	12,	.25
61. Poultry Guide and Friend,	Hammonton, N. J.,	m,	9x12,	2,	8,	.25
62. Poultry Herald,	St. Paul, Minn.,	m,	9x12,	2,	14,	.50
63. Poultry Keeper,	Parkesburg, Pa.,	m,	9x12,	2,	16,	.50
64. Poultry Monthly,	Albany, N. Y.,	m,	9x11,	2,	66,	1.25
65. Poultry and Stock Review,	Syracuse, N. Y.,	m,	9x12,	2,	16,	.50
66. Prairie Farmer,	Chicago, Ill.,	w,	11x16,	1,	16,	1.00
67. Rural and Poultry World,	Syracuse, N. Y.,	m,	10x13,	1-6,	16,	.50
68. Rural Long Islander,	Echo, N. Y.,	m,	15x22,	6-1,	8,	.50
69. Seed Time and Harvest,	La Plume, Pa.,	m,	9x12,	4-6,	16,	.50
70. South Cultivator & Dixie Farm'r,	Atlanta, Ga.,	m,	9x12,	1,	70,	1.00
71. Southern Farm,	Atlanta, Ga.,	m,	9x12,	1,	68,	1.00
72. The Household,	Boston, Mass.,	m,	10x15,	6,	32,	1.00
73. Turf, Field and Farm,	New York, N. Y.,	w,	13x18,	5,	28,	5.00
74. Vineyardist,	Pen Yan, N. Y.,	s-m,	13x17,	4,	8,	1.00
75. W. Agriculturist & L. Stock Journ'l, Quincy, Ill.,	Quincy, Ill.,	m,	9x12,	5,	36,	1.10
76. Western Horseman,	Indianapolis, Ind.,	w,	11x15,	5,	32,	2.00
77. Western World, Illustrated,	Chicago, Ill.,	q.	11x15,	6,	16,	.25
78. Wisconsin Agriculturist,	Racine, Wis.,	s-m,	12x18,	1,	12,	.50
79. Journal of Agriculture,	St. Louis, Mo.,	w,	17x22,	1,	8,	1.00
80. Metropolitan and Rural Home,	New York, N. Y.,	m,	13x18,	6,	16,	1.00

TO EXPERIMENT STATIONS.

I wish to suggest to the Experiment Stations in the East and South, that they would be using their money to great advantage to the inquiring farmer by publishing the substance of such a book as Mr. Greiner's Practical Farm Chemistry for free distribution. It would be one of the greatest helps to the clear understanding of many of their valuable reports. I would be glad to have the Stations tell us whether sunburned or greened potatoes are not better for seed than the same stock always kept from the light. I believe they are. I have raised some first early potatoes by sprouting them four or five weeks before planting time in a light, warm, and moist room. These are just about a month earlier than the same stock planted in the ordinary way. I have found that these stubbed green sprouts a half inch long throw out rootlets before coming to the surface of the ground, while by the common method rootlets are not formed much until the sprouts get up. It may be best to expose our seed stock at digging time for several days to the sunlight before storing. I would like the Stations to tell us if the potatoes are not of better quality to eat if dug at once upon getting ripe than they are if left in the ground for several weeks? I have found it so. Also, I want to know if potatoes don't improve for seed purposes by laying them in the soil till late in the fall? I have thought they did.

Are you interested in
Broilers, Eggs and Market Poultry?
 If so, send for a *Free Sample Copy* of the
Poultry Guide and Friend,
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 MICHAEL K. BOYER, Editor.

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Valuable to the Farmer and Fruit Grower!
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Full of Original Matter!
The best Paper published
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John H. Butler, Editor, Penn Yan, N. Y.



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 money by selling Eggs and
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 Gives all the latest ideas on
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OUR RURAL HOMES,

- - - STURGIS, MICH.

(Continued from page 7.)

out, giving the longest time for growth before hot weather sets in. Cultivate at least twice each week until the vines begin to cover the spaces between the rows. Use the best fertilizer possible to obtain, both at time of planting and during the cultivation.

The average value per bushel between 1870 and 1880 was fifty-six cents, and from 1880 to 1890, fifty cents per bushel. The average value per acre for the former period was \$49.51, and for the latter it was \$38.41.

The annual average yield from 1870 to 1880 was 132,837,175 bushels, and that of the last ten years was 169,570,223, showing an increase in the past ten years of 36,733,047.

The value per acre of corn for the last ten years was \$9.48; that of wheat, \$9.97; oats, \$8.22, and rye, \$7.39 per acre.

These figures show the potato crop worth about as much per acre as five acres of other crops, and this can easily be increased two or three fold by improving the seed, and by the use of the most improved implements for planting, and harvesting, the labor and expense of the crop may be reduced at least one-half, which will in itself again double the value of the crop.

With the "Aspinwall" Potato Planter, made by the Aspinwall Manufacturing Company, Three Rivers, Mich., one man and team will plant five acres a day, making rows straight and leaving the hills in a straight line, greatly facilitating the cultivation and digging.

Iowa.

E. S. TEAGARDEN.

From Farm, Field and Stockman.

MY ADVERTISERS.

In regard to my advertisers I will say that it is an easy thing to get a lot of advertisements, but many persons who are the most desirous to advertise I would not admit to my pages at any price. I am very particular as to standing of the parties who appear as advertisers in my Manual and believe that they are all reliable and to be depended upon and have something, withhold, that is worth advertising. In this matter I believe I am doing my readers a favor in being the means of giving them the addresses of reliable firms.

It will be a favor, doubly appreciated, by both the advertisers and myself if when answering advertisements you will just mention "Howe's Potato Manual."

HOW TO SEND MONEY.

The quickest way is by express money order or bank draft. P. O. money order or registered letters are good, but slow. U. S. Postage Stamps of any denomination taken. MONEY ORDER POST OFFICE IS NORTHAMPTON. Make all papers payable to the order of G. D. Howe. Postal notes are convenient, but no safer than loose cash in the letter, as they are payable to bearer. Individual checks will be taken, but I shall have to stop to collect them before filling the orders which they cover.

FARM ACCOUNT BOOK.

I have a few copies of French's Farm Account Book that I will sell at \$1.00 each by mail, or in connection with potatoes that go by express or freight, for 80 cents each. This is an excellent book, ruled and printed especially to simplify the accounts of the farm. At the above prices it is as cheap as a corresponding blank book at a stationer's, without all the excellent help which this gives.

POULTRY.

Owing to the increasing demands of my potato business, poultry has had to make room in both time and space for what I have placed in greater importance. I still have a very fine pen of Plymouth Rocks and may be able to supply a few sittings at \$1.50 per sitting, to such of my customers as are anxious to get something worth having.

EARLY ORDERS.

To insure promptness in filling your orders for potatoes it will be best to make them out at once and send them by return mail.

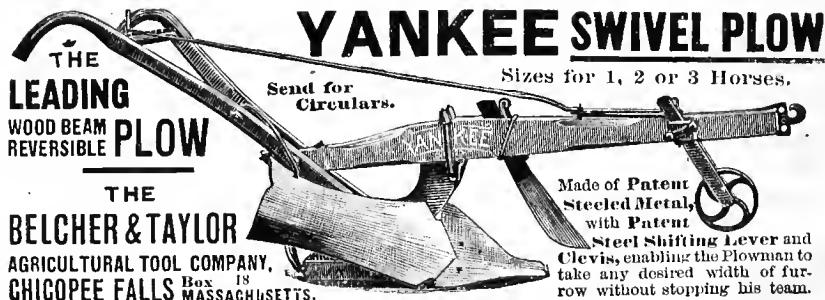
In filling all orders received before the 20th of March, I will put in some extra premium that will be appreciated.

LONDON PURPLE

Is used almost invariably by Farmers, Fruit Growers and others for spraying to destroy the Codlin Moth, Canker Worm, Cureulio, Elm Beetle, Potato Bug and all leaf eating Caterpillars and Insects.

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THE ONE HORSE PLOWS are so arranged that the HORSE CAN WALK IN THE FURROW while the Plow is taking its regular furrow. The one horse Plow is a great favorite with *Gardeners or Small Farmers.* Shall be pleased to forward our prices and Illustrated Catalogues to all who may send for them. Address

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CHICOOPEE FALLS, MASS.

BOOKS.

IT is a pleasure to continue the Book Department of my Manual. I believe it is both an interesting and profitable directory for my readers. If we are in the flush of business success, a few well selected books will help us to maintain our prosperity and suggest new and pleasant avenues of thought and effort. If the times are hard with us, we certainly cannot give up one or two necessary books which will help us to better our condition. To the making of many books there is no end. We cannot buy, or give the time to read, every publication that comes along; therefore a careful selection of those that supply our want is necessary. As I am familiar with a very large number of works specially relating to agriculture, in the great diversity of subjects relating thereto, it will be a pleasure to help any inquirers to find the help they are looking for. The following list is a description of the volumes sent me the past year for examination, and as they come from reliable sources, it is a privilege to acknowledge them here. Some of them indeed are really standard works and the leading things of the kind. Where the style of binding is not mentioned, it may be inferred that the ordinary stiff cloth binding is meant.

PRACTICAL FARM CHEMISTRY,—a hand-book of profitable crop feeding. From the author, T. Greiner, La Salle, N. Y. Size, 5 x 8 in., 168 pages, price \$1.00. The subject is divided into three parts. I. The raw materials of plant food. II. The available sources of supply. III—Principles of economic application, or manuring for money. It is seldom a book comes to my hands that claims my attention as this book did. When it came I looked hurriedly through it, and as I felt somewhat familiar with its subject matter, I looked along till I got to the third division, and there began to read, and it was so interesting, so sound, so simple, that when I had completed I turned back to the second division and read that through, and then to the first and through that. I believe this is the most valuable book to Eastern farmers of anything I have ever come across on this subject, or for that matter on any subject, for everything depends upon fertility in working the exhausted lands of the East. Those who have difficulty in reading understandingly the Experiment Station Reports would find the study of this work just what they want to unlock a vast amount of information to them. I heartily endorse the book, both from study and practical experience, from beginning to end and feel that I can do my readers no greater favor than to urge their procuring a copy at once. It is pleasingly simple, clear, and yet not for children. The chapter on Clover the Source of Carbon as well as nitrogen, suggests a very valuable argument to the uses of chemical manures. The position taken is ahead of that in the book "Chemicals and Clover" noticed elsewhere, highly as I can commend that little pamphlet.

THE NURSERY BOOK.—A Complete Guide to the Multiplication and Pollination of Plants, by Prof. L. H. Bailey, from the publishers, The Rural Publishing Co., New York City. Size 5 x 7½ in., 304 pages. Price in cloth, \$1.00, in paper cover, 50c. Illustrated. The fact that this book is from the hands of Prof. Bailey is sufficient endorsement of its value to Horticulturists. A finely gotten up book, in every sense. It covers minutely the subject of propagation and crossing of plants, beside miscellaneous valuable information.

BEE KEEPING FOR PROFIT.—A New System of Bee Management, from the author, Mrs. Lizzie E. Cotton, West Gorham, Maine. Size, 5 x 7½ in., 146 pages. Price, \$1.00. Paper cover. It describes the author's modern method of handling bees to make them veritable money gatherers.

LANDSCAPE GARDENING,—by Elias A. Long, editor of American Gardening. From the publishers, The Rural Publishing Co., New York City. Size, 7 x 10 inches, 32 pages, price 50 cents. Very heavy paper cover. Fully illustrated. Printed on highly finished heavy paper. Consists of a collection of plans, illustrating the improvement of home grounds, town lots, etc. Mr. Long is an expert in this line.

PRACTICAL HOUSEKEEPING,—from the publishers, The Buckeye Publishing Co., Minneapolis, Minn. Size, 6 x 8½ in., 688 pages, illustrated. While this is a cook book, it contains a vast amount of valuable information about house keeping and household economy, beside. That this is the most popular Receipt Book before the public is shown by the fact that it has had a sale of over 700,000 copies. As it comes from the office of the Housekeeper, it can be relied upon.

1892.

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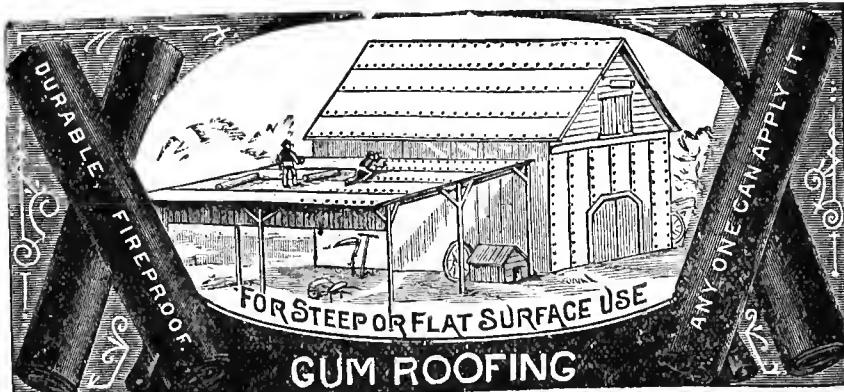
After years of successive trial by MR. STONE of Claremont, N. H., MR. TISDALE of Needham, Mass., MR. HARDY of Plaistow, N. H., MR. PARSONS of Lexington, Mass., and many others throughout the New England States, to whom we are at liberty to refer, speak of the Allen Potato Fertilizer in the highest terms, in connection with their crops, while others in their neighborhood using other fertilizer, had little or no success.

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HANDBOOK OF AMHERST, MASSACHUSETTS,—from the author and publisher, Frederick H. Hitchcock. Size, 6 x 8 in., 197 pages, price \$1.10. Embellished with seventy illustrations. This volume must be of great interest and value to all persons interested in Amherst, the town of two colleges and many private schools. A beautiful specimen of a book, the press work is the very best, the paper is heavy and highly finished, and in accord with the mechanical side, the subject matter is carefully and accurately arranged; thus making a great addition to local history.

CHARACTER READING FROM PHOTOGRAPHS,—by Nelson Sizer, from Fowler & Wells Co., New York, N. Y. Size, 5 x 7 in., 32 pages, price 10 cents. Paper cover, illustrated. Novel and interesting.

CHEMICALS AND CLOVER,—by H. W. Collingwood, managing editor of the *Rural New Yorker*. Published by the Rural Publishing Co., New York City. Size, 5½ x 8 in., 36 pages, price 20 cents. This little pamphlet will open a world of thought and possibility to the owner of many a worn out farm. On the whole I endorse the principles given in it; but know of some farms where in the past it has been tried and not wholly proved as here suggested,—that is, the crop of potatoes has not paid for the heavy dressing of fertilizer, to say nothing of the other costs of raising. The land was destitute of carbon, or humus as sometimes called, and must have that substance supplied by barnyard manure, or the plowing in of green crops before the first crop of potatoes in the rotation will pay for the heavy dressing of fertilizer as proposed; Mr. Greiner's thoughts on this subject in his *Farm Chemistry*, must go with and modify this book as applies to many pieces of land that I am familiar with.

THE CAULIFLOWER,—from the author, A. A. Crozier, of Ann Arbor, Mich. Size, 5 x 7½ in., 24 pages, price \$1.00. A very neat volume embracing every detail of the subject from the seed to the cooked vegetable ready to eat. Every progressive gardener should have it.

VACATION TIME, WITH HINTS ON SUMMER LIVING,—by H. S. Drayton, M. D. From the publishers, Fowler & Wells Co., 775 Broadway, N. Y. Size, 5 x 7 in., 96 pages, price 25 cents. Paper covers. An interesting and instructive little hand-book.

SPRAYING CROPS, WHY, WHEN AND HOW,—by Prof. C. M. Weed of Hanover, N. H. A handy volume, fully illustrated, up to the times, necessary to the gardener and progressive farmer. Size 4½ x 6½, 122 pages, price in paper cover 50 cents, in flexible cloth cover 75 cts.

PALLISER'S AMERICAN ARCHITECTURE, OR EVERY MAN A COMPLETE BUILDER,—by Palliser, Palliser & Co., architects, New York. From J. S. Ogilvie, publisher, 57 Rose St., N. Y. City. Size, 11 x 14 in., 104 pages, printed on heavy paper; more than half the book consists of illustrations. Price, in paper cover \$1.00, in cloth \$2.00. This is a very complete work of its kind, and is considered a standard authority in its way. Our rural homes can be beautified and improved, even if we do not build new houses, at a slight expense, if we only know how to go at it. This book will help all inquirers in this direction.

CAPONS AND CAPONIZING,—by Geo. Q. Dow. From the publisher, C. C. DePuy, Syracuse, N. Y. Size, 5 x 7 in., 56 pages, price 25 cents. Paper covers. A concise as well as complete little pamphlet by a recognized authority. This subject should be looked up by all poultry raisers.

ONION RAISING: WHAT KINDS TO RAISE, AND THE WAY TO RAISE THEM,—from the author and publisher, James J. H. Gregory, Seedsman, Marblehead, Mass. Size, 5 x 7 in., 55 pages, price 30 cents. Paper cover, illustrated. Concise and interesting, by a high authority. To the onion grower, the price is nothing compared to the valuable hints and information this treatise contains.

HOME DECORATIVE WORK.—compiled by the editor of "The Housekeeper." Fully illustrated. From the Buckeye Publishing Co., of Minneapolis, Minn. Size, 6 x 8 in., 464 pages. This is the most elaborate work we ever saw, designed to aid the indoor-partuer of our business, in beautifying the home by artistic work of needle, thread, etc. It is very explicit in all details and will interest all ladies who do fancy work.

READY FOR BUSINESS, OR CHOOSING AN OCCUPATION,—by George J. Manson, from the publishers, Fowler & Wells Co., New York City. Size, 5 x 7½ in., 120 pages, price 75 cents. This consists of a series of practical papers for boys and young men yet undecided upon what path of life's work they will take up. It will make a grand present for the boy on his birthday or other anniversary. The helpful stimulus received from its study may shape his whole life.

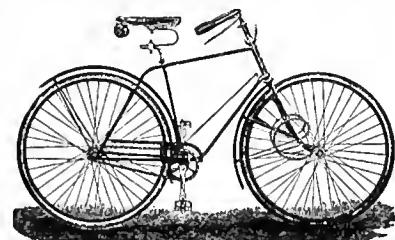
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HOUSES AND COTTAGES, No. 4,—by D. S. Hopkins, architect, Grand Rapids, Mich. From the author, prie \$1.00. A collection of 35 designs of houses costing from \$150 to \$1500. Size, 8 x 11 in., 64 pages; about half the book consists of illustrations. Bound in strong paper covers. Well worth the prie to anybody contemplating building a low cost house, or remodeling one they already have. The author furnishes at a moderate prie working plans of all designs he publishes in his many books.

CELERI GROWING,—from the author, Homer L. Stewart, of Tecumseh, Mich. Size, 5½ x 7½ in., 151 pages. A very complete treatise on the subject, covering every detail connected therewith. Illustrated. Mr. Stewart has been eminently successful in his line of business, and his life long experiences can be purchased at a prie in his book.

CABBAGES AND CAULIFLOWERS: HOW TO GROW THEM,—from the author and publisher, James J. H. Gregory, Seedsman, Marblehead, Mass. A practical treatise, giving full details on every point, including keeping and marketing the crop. It will prove very helpful to all especially interested in these crops. Size, 5 x 7½ in., 88 pages, price 30 cents, paper covers.

HOW TO DESTROY INSECTS ON PLANTS AND FLOWERS, IN THE GARDEN AND HOUSE,—from the publisher, Ralph H. Waggoner, 10 Spruce St., New York City. Size, 4 x 6 in., 103 pages, price 30 cents, paper cover. A useful little pamphlet, giving many practical suggestions.

HOUSES AND COTTAGES, No. 5,—from the author and publisher, D. S. Hopkins, Architect, Grand Rapids, Mich. Consists of 55 designs of houses, costing upwards from \$1800. About half the book consists of fine illustrations. Size, 8 x 11 in., 136 pages, prie \$1.00. Heavy paper covers. This book will suggest many good ideas to any house owner, both as to build ing outright or repairing old buildings.

INSECTS AND INSECTICIDES,—a practical manual concerning noxious insects and the methods of preventing their injuries. From the author and publisher, Clarence M. Weed, Professor of Entomology and Zoology in the New Hampshire Agricultural College, Hanover, N. H. Size, 6 x 9 inches, 292 pages, profusely illustrated, price \$1.25. This book is written in a popular style and can be easily understood by those desirous of learning more of the subject of which it treats. To become successful now in most any branch of agriculture one must have a considerable knowledge of our insect foes.

HOW TO COOK CAULIFLOWER,—from the author, A. A. Crozier, Ann Arbor, Mich. Taken from the author's book on "The Cauliflower." Size, 5 x 7½ in., 28 pages, price 10 cents, paper cover. It fully covers the subject.

LOOKING FORWARD FOR YOUNG MEN: THEIR INTEREST AND SUCCESS,—by Rev. George Sumner Weaver, D. D. From the publishers, Fowler & Wells Co., New York, N. Y. Size, 5 x 7½ in., 224 pages, price \$1.00. A grand book for young men. It is sure to stimulate to noble effort and high aims. Try it for the young men of your home.

EQUINE ANATOMY AND PHYSIOLOGY,—by Wm. R. Ballou, M. D., fully illustrated. From the publishers, R. Blackston, Son & Co., 1012 Walnut St., Philadelphia, Pa. Size, 5 x 7 in., 223 pages, prie \$1.00. A valuable assistant to all who are studying up the science of veterinary surgery. It comes from a high authority and can be relied upon.

HOME FLORICULTURE,—a Familiar Guide to the Treatment of Flowering and other Ornamental Plants in the House and Garden, by Eben E. Rexford, illustrated. From the publishers, James Viek's Sons, Rochester, N. Y. Size, 5 x 7½ in., 226 pages. Certainly a standard in its sphere. Brought down to the present date. Simple and full in every detail. Interesting and instructive to all who are studying the art of making home surroundings pleasant.

FUNGUS DISEASES OF THE GRAPE AND OTHER PLANTS, AND THEIR TREATMENT,—by Prof. F. Lawton-Scribner, from the publishers, J. T. Lovett Co., Little Silver, N. J. Size, 5½ x 8 in., 134 pages, prie, paper 50 cents, cloth 75 cents. Fully illustrated. Should be in the hands of every vineyardist of the country. Of interest to horticulturists in general. The author is a leading authority and this work does him credit.

HEADS AND FACES. HOW TO STUDY THEM,—by Nelson Sizer and H. S. Drayton, from the publishers, Fowler & Wells Co., New York City. Size, 6 x 9 inches, 223 pages, prie, paper cover 40 cents, profusely illustrated. The popularity of this work is shown in the fact that it is now in its 97 thousandth edition. It is very entertaining and instructive, full of suggestive thought.

THE MODIFICATION OF PLANTS BY CLIMATE,—from the author and publisher, A. A. Crozier Ann Arbor, Mich. Size, 5½ x 9 in., 38 pages, pries 25 cents, paper cover. It treats of the relations of climate to fruitfulness, vigor, hardiness and earliness. Full of interest to improvers of plants. Tells where the best seeds are grown and why.

OUTLINES OF ENTOMOLOGY,—Prepared for the use of farmers and horticulturists, from the author, Mary E. Murtfeldt, of Kirkwood, Mo. Size, 6 x 9½ in., 135 pages, prie, cloth binding 50 cents, paper cover 30 cents, illustrated. The author has endeavored to present the subject in so simple a way that the common every day inquirer can easily understand it.



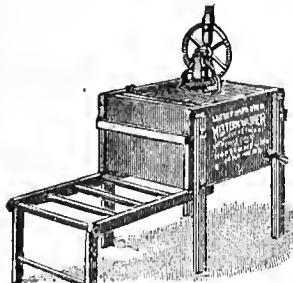
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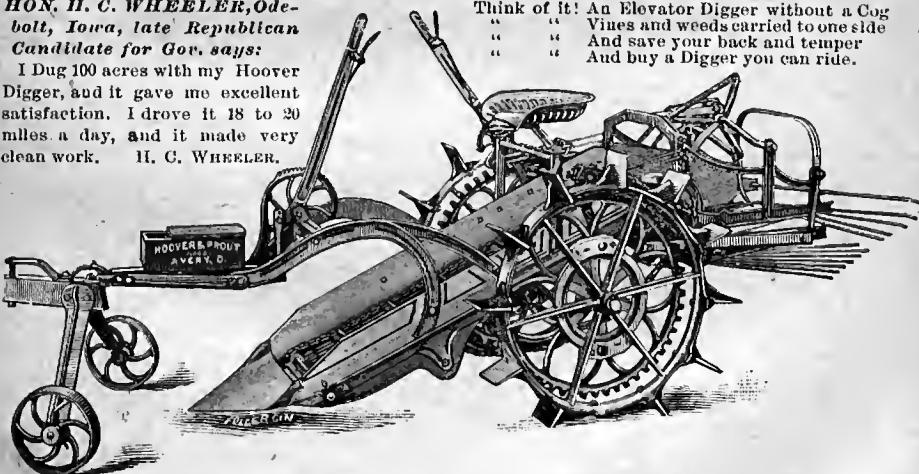
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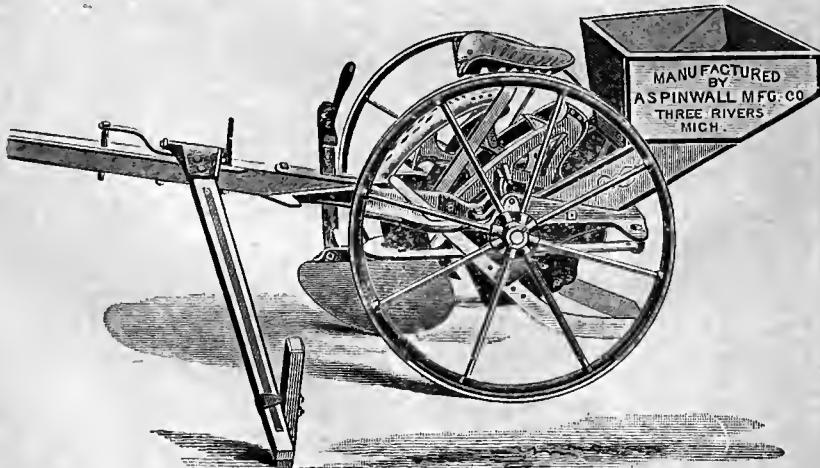
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